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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/721,851	11/24/2000	Tsann Lin	SJO919980026US2 5204	
7	590 05/07/2003			
Ervin F Johnston International Business Machines Corporation 5600 Cottle Road IP law L2PA/014 San Jose, CA 95193			EXAMINER	
			KIM, PAUL D	
			ART UNIT	PAPER NUMBER
5411 5050, 071	,51,5		3729	57
			DATE MAILED: 05/07/2003	

Please find below and/or attached an Office communication concerning this application or proceeding.

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· · · · · · · · · · · · · · · · · · ·	Application No.	Applicant(s)				
Office Action Summers	09/721,851	LIN ET AL.				
Office Action Summary	Examiner	Art Unit				
The MAILING DATE of this communication and	Paul D Kim	3729				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status						
1) Responsive to communication(s) filed on 31 N	<u>farch 2003</u> .	•				
2a) This action is <b>FINAL</b> . 2b) ⊠ Thi	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.						
Disposition of Claims	Ex parte Quayle, 1935 C.D. 11, 4	505 O.G. 215.				
4)⊠ Claim(s) <u>23-48 and 50</u> is/are pending in the application.						
4a) Of the above claim(s) <u>43-48 and 50</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>23-42</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/or election requirement.						
Application Papers						
9) The specification is objected to by the Examiner.  10) The drawing(s) filed on is/are: a) □ accepted or b) □ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
11) The proposed drawing correction filed on is: a) approved b) disapproved by the Examiner.						
If approved, corrected drawings are required in reply to this Office action.						
12) The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. §§ 119 and 120						
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).						
a) All b) Some * c) None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
<ul> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>						
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).						
a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.						
Attachment(s)						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)				

U.S. Patent and Trademark Office PTO-326 (Rev. 04-01) Application/Control Number: 09/721,851 Page 2

Art, Unit: 3729

## **DETAILED ACTION**

1. This office action is a response to the restriction requirement filed on 3/31/2003.

#### Election/Restrictions

- 2. Applicant's election without traverse of Group I, claims 23-42, in Paper No. 6 is acknowledged.
- 3. Claims 43-48 and 50 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 6.

## Claim Objections

4. Claim 30 is objected to because of the following informalities:

There are underlines in lines 18 and 19.

Before the "the forming" in line 27, Insert -wherein--.

Appropriate correction is required.

## Claim Rejections - 35 USC § 112

- 5. The following is a quotation of the second paragraph of 35 U.S.C. 112:
  - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 6. Claims 23-42 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Application/Control Number: 09/721,851

Art Unit: 3729

Re. Claim 23: The limitation "at first and second lead layer sites" in lines 10 and 11 are renders vague and indefinite. It is unclear as to where the first and second lead layer sites are located.

The limitation "a spin valve sensor" in line 12 renders vague and indefinite. It is unclear whether this spin valve sensor is the same sensor in line 8 or a new sensor.

Re. Claim 26: The limitation "in a field that is directed transverse to the ABS" in line 20 renders the claim vague and indefinite. It is unclear as to what the "a field" is indicated.

Re. Claim 29: The limitation "in a field that is directed parallel to the ABS" in line 20 renders the claim vague and indefinite. It is unclear as to what the "a field" is indicated.

Re. Claim 30: The limitation "the first and second shield layers" in lines 20 and 21 lacks antecedent basis.

The limitation "forming an antiferromagentic oxide film between the insulation film and the first lead layer in the first end region" in lines 22-23 renders the claim vague and indefinite. It is unclear as to where the insulation film is located.

### Allowable Subject Matter

7. Claims 23-42 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

Application/Control Number: 09/721,851 Page 4

Art Unit: 3729

#### Conclusion

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D Kim whose telephone number is 703-308-8356. The examiner can normally be reached on Tuesday-Friday between 7:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 703-308-1789. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9302 for regular communications and 703-872-9303 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-5648.

A. DEXTER TUGBANG
PATENT EXAMINER

pdk April 14, 2003